NL INDUSTRIES/TARACORP SUPERFUND SITE GROUP

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June 30, 2020

By Electronic Mail and First Class Mail

Ms. Sheri L. Bianchin Remedial Project Manager Institutional Controls Coordinator U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard (SR-6J) Chicago, IL 60604

Re: NL Industries/Taracorp Superfund Site; Granite City, Illinois First 2020 Semi-Annual Operation and Maintenance Inspection (June 2020)

Dear Ms. Bianchin:

On behalf of the NL Industries/Taracorp Superfund Site Group (Group), enclosed are copies of the log sheets, aerial photographs, and reproductions of ground-level photographs documenting the results from the first 2020 semi-annual operation and maintenance inspection performed on June 25, 2020 at the NL Industries/Taracorp Superfund Site in Granite City, Illinois.

The results of the inspection are summarized as follows:

- At Slough Road (shown on Figure 1 and the photographs in Attachment 1), no disturbance of the gravel cover to the previously paved area was observed. Also, I met with Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc. (Beelman), who confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time the paved roadway was covered with soil/gravel fill as part of the expansion of Beelman's operations. Mr. Boyd also indicated that Ameren has placed stakes into the ground to mark the location of its new electrical transmission tower; this area was not observed, but the area is located outside (to the west/southwest) of the former Slough Road area. Some scattered battery case chips were observed on the concrete foundation of the former Robin's Nest lounge.
- The paved portion of Watson Alley in Eagle Park Acres (shown on Figure 2 and the photographs in Attachment 2) was inspected. No disturbance to the paved surface of the alley was evident.
- During the inspection in Eagle Park Acres, the vacant lot on Harrison Street (adjacent to the unpaved portion of Watson Alley, which was recently cleared of vegetation and where battery case chips were previously observed) was checked. Some scattered battery case chips were observed on the ground surface. No evidence of soil disturbance was observed; the property is covered with vegetation which appears to have been recently mowed.

- Two remote fill properties Non-Responsive in Eagle Park Acres (Figure 3) that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below the ground surface) were observed during the inspection. No evidence of subsurface soil disturbance was observed. The properties are lawn-covered and mowed.
- Alleys in Venice that were paved during remedial activities were noted to be in generally good condition. The Venice alleys are shown on Figure 1 and are identified on the photographs in Attachment 4. Some small asphalt patches were observed, confirming that the local municipality is continuing to repair and repave alleys, as necessary.
- Observations of the Taracorp pile cap and 1555 State Street property (Figure 4) are shown on the photographs provided in Attachment 5. No problems impacting the effectiveness of the Taracorp pile cap, the concrete surface water drainage channel around the Taracorp pile, or the stormwater discharge system were observed during the inspection. The following activities have been initiated in response to the observations during the inspection of the Taracorp pile and 1555 State Street property:
 - The Group has requested that its lawn maintenance contractor, Munie Greencare Professionals (Munie), check the vegetation more frequently (and cut it when necessary), cut and remove several bushes along the sidewalk, and remove some vegetation from the fence along State Street (Attachment 5, photographs 68, 70, and 71). Munie has also been requested to replant grass in the area between the sidewalk and State Street (Attachment 5, photographs 68-71).
 - The Group has notified the owner/operator of All Pallet Services, one of the companies that operates on the neighboring property, and has requested that All Pallet Services repair a bent section of fence, a separated fence post, and some torn barbed wire (Attachment 5, photographs 40-44) along the State Street Warehouse side of the property.
- As shown on the photographs in Attachment 6, no evidence of disturbance of the soil cover or asphalt roadway was observed at Schaeffer Road (a remote fill property remediated by EPA). Several scattered battery case chips were observed on the ground surface near a sanitary sewer manhole located near the western end of Schaeffer Road at the approximate location on Figure 5. This area is currently being farmed.
- At Sand Road (also a remote fill property remediated by EPA), some scattered battery case chips were observed on the ground surface within the foundation area of a former building on the property (Attachment 7, photographs 3-10, 13, and 14). The property is currently being farmed; however, no evidence of disturbance of the soil within the foundation area was observed.

Mr. Sheri Bianchin June 30, 2020 Page 3

Please let me know if you have questions or if additional information or clarification is needed at this time.

Very truly yours,

LEED ENVIRONMENTAL, INC.

Project Coordinator

attachments

cc: Mr. Brian Conrath / Mr. Tom Miller – Illinois Environmental Protection Agency (w/attachments, by electronic mail)

Technical Committee, NL Industries/Taracorp Superfund Site Group (w/attachments, by electronic mail)

Inspection Date: 6/25/2020 Weather: Hot, humid: 72°F - 89°F

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.				Weather: Hot, humid: 72°F - 89°F		
Site Structure	Inspected (yes/no)	Problem(s) Identified (yes/no)	Inspection Observations	Maintenance Work Performed or Required		
PAVED ALLEYS						
Slough Road						
Evidence of broken or deteriorated asphalt	Yes	No				
Visual evidence of hard rubber battery case chips	Yes	No	Scattered battery case chips observed on concrete foundation of former Robin's Nest lounge.			
Indicate location and extent						
Comments			See Note 1.			
Eagle Park Acres (Watson Alley)						
Evidence of disturbance to paved surface of Watson Alley	Yes	No				
Visual evidence of hard rubber battery case chips	Yes	No				
Indicate location and extent						
Comments			See Note 2.			
Venice Alleys						
Evidence of broken or deteriorated asphalt	Yes	No				
Visual evidence of hard rubber battery case chips	Yes	No				
Indicate location and extent						
Comments			See Note 3.			

Notes/Observations:

- 1. At Slough Road (Figure 1) and as shown on the photographs in Attachment 1, Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc., confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time it was covered with soil fill.
- 2. The paved portion of Watson Alley in Eagle Park Acres (as shown on Figure 2 and the photographs in Attachment 2) was inspected and noted to be in good condition.
- 3. Alleys in Venice that were paved during remedial activities were inspected and noted to be in generally good condition. Some small asphalt patches were observed. The Venice alleys are shown on Figure 1 and are identified on the photographs in Attachment 4.

Inspection Date: 6/25/2020 Weather: Hot. humid: 72°F - 89°F

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.				Weather: Hot, humid: 72°F - 89°F	
Site Structure	Inspected (yes/no)	Problem(s) Identified (yes/no)	Inspection Observations	Maintenance Work	
REMOTE FILL PROPERTIES - EAGLE PARK ACRES				200000000000000000000000000000000000000	
Non-Responsive					
Evidence of settlement, erosion, deterioration, or excavation	Yes	No			
Visual evidence of hard rubber battery case chips (if excavation or other disturbance of soil cover is observed)	Yes (drive-by)	No	No evidence of soil disturbance.		
Indicate location and extent	L. 1				
Comments		=;	See Note 4.		
Non-Responsive					
Evidence of settlement, erosion, deterioration, or excavation	Yes	No			
Visual evidence of hard rubber battery case chips (if excavation or other disturbance of soil cover is observed)	Yes (drive-by)	No	No evidence of soil disturbance.		
Indicate location and extent					
Comments			See Note 4.		

Notes/Observations:

4. Two remote fill properties (200 Allen Street and 206 Terry Street) in Eagle Park Acres (Figure 3) that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of 3 feet below ground surface) were observed during the inspection. As shown on the photographs in Attachment 3, the properties are vacant, vegetated, and no evidence of subsurface soil disturbance was observed.

Inspection Date: 6/25/2020

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc. Weather: Hot, humid: 72°F - 89°F Problem(s) Inspected **Maintenance Work Site Structure** Identified **Inspection Observations Performed or Required** (yes/no) (yes/no) TARACORP PILE PROPERTIES (TARACORP PROPERTY AND 1555 STATE STREET PROPERTY) **Security Fence - Condition** Gates/locks secure and operative Yes No Yes A bent section of fence and separated fence post (Attachment 5, photographs 40-44) Evidence of rust, cuts, deterioration, or other damage Yes The Group has requested that All Pallet Services address these items. was observed along State Street Warehouse property. Yes No Evidence of unauthorized entry No Burrowing or tunneling under fence Yes Yes No Damaged barbed wire Comments No evidence of unauthorized entry. Security Fence - Warning Signs Yes No Evidence of rust, cuts, deterioration, or other damage No Yes Evidence of tampering Securely affixed to fence No Yes Yes No Signs legible Comments Access Road Yes No Evidence of settlement or deterioration Comments No access road problems. Taracorp Pile - Vegetation Adequate growth of vegetation Growth abundant. Yes No Yes No Adequate diversity of vegetation Wildflowers and crown vetch observed on cap. Evidence of stress Yes No Yes No No trees, shrubs, etc. observed. Presence of trees, shrubs, woody bushes Yes No Need for mowing/maintenance The Group's contractor, Munie Greencare Professionals (Munie), cut the vegetation on The Group has requested that Munie cut and remove several small Comments the flat parts of 1555 State Street property and applied herbicide on June 9, 2020. bushes and remove vegetation from the area along the State Street (Attachment 5, photographs 68, 70, and 71). Taracorp Pile - Erosion Yes No Evidence of erosion Indicate areal extent and location Comments No erosion evident. **Taracorp Pile - Settlement** Evidence of settlement Yes No Indicate areal extent and location ---Comments No settlement evident. Taracorp Pile - Cracks Evidence of cracks Yes No Indicate areal extent and location

No cracks evident.

Comments

Inspection Date: 6/25/2020

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.				Weather: Hot, humid: 72°F - 89°F			
Site Structure	Inspected (yes/no)	Problem(s) Identified (yes/no)	Inspection Observations	Maintenance Work Performed or Required			
TARACORP PILE PROPERTIES (TARACORP PROPERTY AND 1555 STATE STREET PROPERTY)							
Taracorp Pile - Ponding							
Evidence of ponding	Yes	No					
Indicate areal extent and location							
Comments			No ponding evident.				
Taracorp Pile - Bulges							
Evidence of bulges	Yes	No					
Indicate areal extent and location							
Comments			No bulges evident.				
Taracorp Pile - Seeps							
Evidence of seepage (leachate)	Yes	No					
Indicate areal extent and location							
Comments			No evidence of seepage observed.				
Taracorp Pile - Slope Stability							
Evidence of sliding	Yes	No					
Indicate areal extent and location							
Comments			No sliding evident.				
Taracorp Pile - Leachate Management System							
Riser pipe - evidence of deterioration	Yes	No					
Riser pipe - locked	Yes	No					
Leachate levels in sump	No						
Comments			No problems identified. Leachate level checked during five-year review site work.				
Concrete Drainage Channel Around Taracorp Pil	e						
Evidence of cracks or other deterioration	Yes	Yes	Some cracks observed in concrete drainage channel (probably from mowing). No evidence of adverse impacts to surface water drainage.				
Evidence of obstructions	Yes	No					
Evidence of erosion	Yes	No					
Evidence of improper drainage	Yes	No					
Comments							
Retention Basin for Stormwater Runoff							
Adequate vegetation	Yes	No					
Evidence of erosion or deterioration	Yes	No					
Appropriate drainage to storm sewer	Yes	No					
Comments			No problems with retention basin evident.				
Concrete Sidewalk (1555 State Street Property)							
Evidence of cracks or other deterioration	Yes	No					
Comments			Concrete sidewalk is in good condition; no problems identified.				

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.

Inspection Date: 6/25/2020

Inspector's Name/Company: Jeff Leed, Leed Environmen	Weather: Hot, humid: 72 F - 89 F					
Site Structure	Inspected (yes/no)	Problem(s) Identified (yes/no)	Inspection Observations	Maintenance Work		
OTHER REMOTE FILL PROPERTIES						
Schaeffer Road						
Evidence of settlement, erosion, deterioration, or excavation	Yes	No				
Visual evidence of hard rubber battery case chips (if excavation or other disturbance of soil cover is observed)	Yes	Yes	See Note 5.			
Indicate location and extent						
Comments			See Note 5.			
Sand Road						
Evidence of settlement, erosion, deterioration, or excavation	Yes	No				
Visual evidence of hard rubber battery case chips (if excavation or other disturbance of soil cover is observed)	Yes	Yes	See Note 5.			
Indicate location and extent						

Notes/Observations:

Comments

5. Remote fill properties (Schaeffer Road and Sand Road) previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below ground surface) were observed during the inspection. Photographs are provided in Attachment 6 and Attachment 7, respectively. At Schaeffer Road, several scattered battery case chips were observed on the soil surface near the sanitary sewer manhole near the west end of Schaeffer Road at the approximate location shown on Figure 5. Scattered battery case chips and some other debris (bricks, etc.) were observed within the foundation area of the former building at the Sand Road property shown on Figure 6. Farming is occurring on both properties (no farming within the foundation area where scattered battery case chips were observed).

See Note 5.



Watson Alley

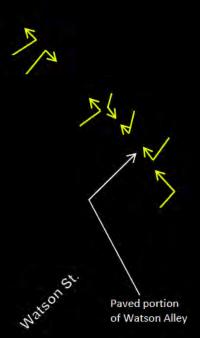


Figure 2
Eagle Park Acres – Watson Alley

Watson Alley photograph locations (photographs provided in Attachment 2).

Non-Responsive

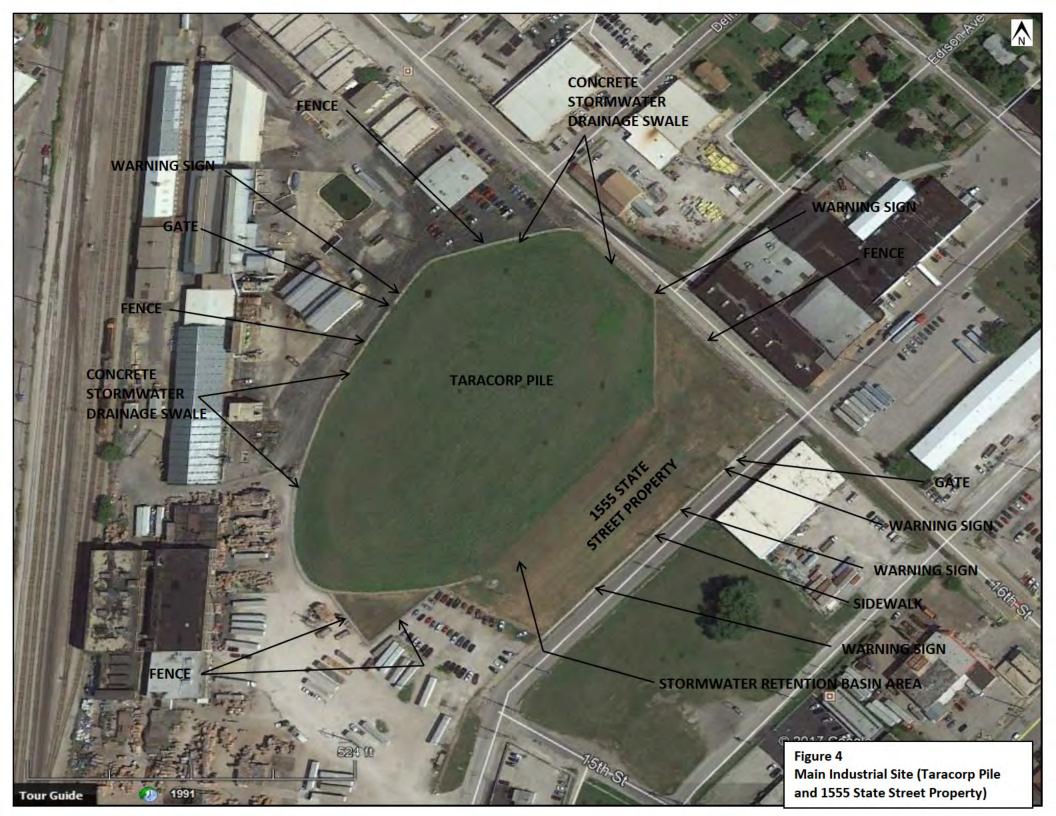




Figure 5 Schaeffer Road



Attachment 1 Slough Road Photographs June 25, 2020



Photograph 1: Beelman storage area/warehouse.



Photograph 2: Fence/gate (view from inside Beelman property).



Photograph 3: Fence/gate (view from inside Beelman property).



Photograph 4: Fence along Bremen Street.



Photograph 5: Fence along Bremen Street.



Photograph 6: Fence along Bremen Street (view from Bremen Street).

Attachment 1 Slough Road Photographs June 25, 2020



Photograph 7: Fence along Bremen Street (view from Bremen Street).



Photograph 8: Slough Road, concrete debris.



Photograph 9: Slough Road, concrete debris.



Photograph 10: Slough Road, concrete foundation of former Robin's Nest lounge.



Photograph 11: Slough Road, battery case chips on foundation of former Robin's Nest Lounge.



Photograph 12: Slough Road, concrete foundation of former Robin's Nest Lounge.

Attachment 1 Slough Road Photographs June 25, 2020



Photograph 13: Slough Road, wood debris piles on concrete foundation of former Robin's Nest lounge.



Photograph 14: Slough road, soil pile.



Photograph 15: Storage of Beelman equipment.



Photograph 16: Storage of Beelman equipment.



















Photograph 1: Entrance to 1555 State Street property along State Street.



Photograph 2: Entrance to 1555 State Street property along State Street.



Photograph 3: Warning sign at front gate along State Street.



Photograph 4: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 5: End of concrete drainage of swale, east side of Taracorp pile.



Photograph 6: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 7: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 8: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 9: Concrete drainage swale, north side of Taracorp pile (view southeast).



Photograph 10: Concrete drainage swale, fence, and vegetation; north side of Taracorp pile along 16th Street (view northwest).



Photograph 11: Concrete drainage swale, fence, and vegetation; north side of Taracorp pile along 16th Street (view northwest).



Photograph 12: Concrete drainage swale, fence, and vegetation; north side of Taracorp pile along 16th Street (view northwest).



Photograph 13: Concrete drainage swale and vegetation; northwestern side of Taracorp pile (view northeast).



Photograph 14: Vegetation, northwestern side of Taracorp pile cap (view southwest).



Photograph 15: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 16: Concrete drainage swale, crack in concrete along northwestern side of Taracorp pile.



Photograph 17: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 18: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 19: Concrete drainage swale, vegetation along northwestern side of Taracorp pile (view north/northeast).



Photograph 20: Fence, warning sign, western side of Taracorp pile.



Photograph 21: Fence, warning sign, western side of Taracorp pile.



Photograph 22: Fence, warning sign, western side of Taracorp pile.



Photograph 23: Vegetation near base of western side of Taracorp pile (view north).



Photograph 24: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view north).



Photograph 25: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 26: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 27: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view north).



Photograph 28: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 29: Concrete drainage swale, western side of Taracorp pile (view north).



Photograph 30: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 31: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view north).



Photograph 32: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view west).



Photograph 33: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view south).



Photograph 34: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view north).



Photograph 35: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view east).



Photograph 36: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view east).



Photograph 37: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view east).



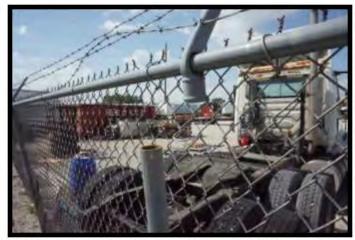
Photograph 38: Fence and concrete drainage swale, southwestern side of Taracorp pile cap (view east).



Photograph 39: Fence along State Street Warehouse storage area.



Photograph 40: Fence along State Street Warehouse storage area, bent fence and broken fence pole.



Photograph 41: Broken fence pole (material staging on State Street Warehouse property).



Photograph 42: Bent fence along State Street Warehouse property storage area.



Photograph 43: Bent fence along State Street Warehouse property storage area.



Photograph 44: Bent fence and broken barbed wire (material staging on State Street Warehouse property).



Photograph 45: Fence (parking area on State Street Warehouse property).



Photograph 46: Vegetation and concrete drainage swale along southern slope of Taracorp pile cap.



Photograph 47: Vegetation and concrete drainage swale along southern slope of Taracorp pile cap.



Photograph 48: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 49: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 50: Southern side of Taracorp pile, stormwater outlet.



Photograph 51: Stormwater outlet.



Photograph 52: Stormwater outlet.



Photograph 53: Stormwater outlet and stormwater retention basin (view northeast).



Photograph 54: Stormwater manhole near fence.



Photograph 55: Stormwater manhole.



Photograph 56: Vegetation and fence near former Rich Oil facility (view toward State Street).



Photograph 57: Vegetation and fence near former Rich Oil facility (view toward State Street).



Photograph 58: Vegetation, eastern side of Taracorp pile cap.



Photograph 59: Leachate riser pipe.



Photograph 60: Locked lid on leachate riser pipe (locked lid installed fall 2007).



Photograph 61: Wildflowers and vegetation, top of Taracorp pile.



Photograph 62: Vegetation, former BV&G Truck Service area.



Photograph 63: Older and newer fence near former BV&G Truck Service buildings and along railroad tracks (view northeast).



Photograph 64: Older and newer fence near former BV&G Truck Service buildings and along railroad tracks (view northwest).



Photograph 65: Inside fence, corner of State Street and 16th Street.



Photograph 66: Inside fence, corner of State Street and 16th Street.



Photograph 67: Inside fence, gate along State Street.



Photograph 68: Vegetation along State Street sidewalk.



Photograph 69: Vegetation along State Street sidewalk.



Photograph 70: Vegetation along State Street sidewalk.



Photograph 71: Vegetation along State Street sidewalk.



Photograph 72: End of State Street sidewalk at railroad tracks.



Photograph 73: Gas utilities along railroad tracks.



Photograph 74: Fence along railroad tracks and 16th Street.



Photograph 75: Warning sign on fence along railroad tracks near 16th Street and Edison Avenue.



Photograph 76: Fence along railroad tracks and 16th Street.



Photograph 77: Fence and vegetation along railroad tracks and 16th Street.



Photograph 78: Monitoring well MW-101.



Photograph 79: Recently constructed bollards around monitoring well MW-105D.

Attachment 6 Schaeffer Road Photographs June 25, 2020



Photograph 1: Schaeffer Road property, entrance.



Photograph 2: Schaeffer Road property, entrance.



Photograph 3: Schaeffer Road property, entrance.



Photograph 4: Schaeffer Road property, entrance.



Photograph 5: Schaeffer Road property, entrance.



Photograph 6: Schaeffer Road property, roadway.

Attachment 6 Schaeffer Road Photographs June 25, 2020



Photograph 7: Schaeffer Road property, roadway.



Photograph 8: Schaeffer Road property, roadway.



Photograph 9: Schaeffer Road property, roadway.



Photograph 10: Schaeffer Road property, roadway.



Photograph 11: Schaeffer Road property, sanitary sewer manhole.



Photograph 12: Schaeffer Road property, sanitary sewer manhole.

Attachment 6 Schaeffer Road Photographs June 25, 2020



Photograph 13: Schaeffer Road property, field near sanitary sewer manhole.



Photograph 14: Schaeffer Road property, road.



Photograph 15: Schaeffer Road property, concrete debris in vegetated area along road.



Photograph 16: Schaeffer Road property, concrete barrier at entrance.

Attachment 7 Sand Road Photographs June 25, 2020



Photograph 1: Sand Road property (view from entrance).



Photograph 2: Sand Road property, stormwater drainage ditch.



Photograph 3: Sand Road property, concrete foundation.



Photograph 4: Sand Road property, concrete foundation.



Photograph 5: Sand Road property, concrete foundation.



Photograph 6: Sand Road property, concrete foundation.

Attachment 7 Sand Road Photographs June 25, 2020



Photograph 7: Sand Road property, concrete foundation..



Photograph 8: Sand Road property, concrete foundation.



Photograph 9: Sand Road property, concrete foundation.



Photograph 10: Sand Road property, concrete foundation.



Photograph 11: Sand Road property, gravel access road (foreground), concrete foundation (background).



Photograph 12: Sand Road property, entrance.

Attachment 7 **Sand Road Photographs** June 25, 2020





Photograph 13: Sand Road property, concrete foundation. Photograph 14: Sand Road property, concrete foundation.